

Work Order ID 51643

August 27, 2009 8:28:39 AM



Page 1

Item ID: D3436-044

Accept



Setup Start



Revision ID: A

Stop



Item Name: Step RH

Start Date: 8/27/09 Start Qty: 1.00



Cust Item ID:

Required Date: 9/04/09 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: *W*

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3436

Rev A

100

0.00



Large Fab

Large Fab

Memo

0.00

Large Fab

Weld bushings D3436-5 and clamp D3436-1 using welding Jig DT8772 and
Dwg D3436Dwg Rev: *1* Qty Part Number Description
Batch: 1A/RN/A 4130 Welding Rod *119317* Weld right
step D3436-4 using welding Jig DT8

EL 9-8-28

110

0.00



BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

1-Slit part D3436-041 on bandsaw as per Dwg D3436

2- deburr

EL 9-8-28

120

0.00



QC9- Inspect visual per QS1004- Fusion Welds

QC

Memo

0.00

Quality Control

DD 09-09-01

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 51643

August 27, 2009 8:28:39 AM



Page 2

Item ID: D3436-044

Accept



Setup Start



Revision ID: A

Stop



Item Name: Step RH

Start Date: 8/27/09 Start Qty: 1.00

Cust Item ID:

Required Date: 9/04/09 Req'd Qty: 1.00

Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC5- Inspect part completeness to step on W/O

0.00

⇒ 8/27/09

(X4 RH)

(P10) ⇒

QC

Memo

0.00

Quality Control

140

White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel

0.00

⇒ 9/10/09

(X4 RH)

Powdercoat

Memo

0.00

Powder Coating

Apply black anti-skid paint as per Dwg D3436 and QSI 005 4.4 (START

TIME: 10:30 AM OVEN TEMPERATURE:

11:00 FINISH TIME: 400°F

WIND WALK

BATCH. M11210C. EXP. 10/20

BR 09-09-3

(4 RH)

150

QC3- Inspect Part Finish

0.00

4

10/05/04

QC

Memo

0.00

Quality Control

151

Band D3436-9 per per clws: QSI 015

EP 09/09/08 (4) (P10)

W/O: 51643		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
05-09-04	150 ↓ 160	- Add step to bench the D3436-9 per drawing: OSI 015 - Add fix routing for the D3436-9: -7 (100) (160)	BE	09.09.08		05-09-04	05-09-04

Part No: D3436-044 PAR #: _____ Fault Category: Large Job NCR: Yes No DQA: 2 Date: 05-05-10
 Resolution: re work Disposition: re work QA: N/C Closed: 2 Date: 05-05-10

NCR: 51643		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
9/9/1	2	During inspection found that the Bushing D3436-5 had a wall thickness of .063" not .049". R.C. welder used wrong bushings.	OSI/M2	- Attempt to drill out all 4 bushing on all 4 Parts. - Ensure to Always verify alternate parts prior to use. - material is the same.	EL 9-9-1	OSI 09/09/01	OSI/M2	OSI 09/09/01
		he used AS380 92-63. w/015 marked clearly and Dwy also to use D3436-5 R.C. LOA cannot be used wrong parts to use	OSI/M2					

NOTE: Date & initial all entries

Work Order ID 51643

August 27, 2009 8:28:39 AM



Page 3

Item ID: D3436-044

Accept



Setup Start



Revision ID: A

Stop



Item Name: Step RH

Start Date: 8/27/09 Start Qty: 1.00



Cust Item ID:

Required Date: 9/04/09 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

2) 808108

SRH

Quality Control

170

Identify as per dwg & Stock Location: 203

0.00



Packaging

Memo

0.00

Packaging

Pg 1/8 Gj

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09109108 HJ
MF
09-09-08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

August 27, 2009 10:08:25 AM

Page 1

Work Order ID: 51643

Parent Item: D3436-044RevA

Parent Item Name: Step RH



Comments:

Start Date: 8/27/09

Required Date: 9/04/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3436-1RevA  Clamp		Manufactured	No			100	Each	6.0000	1.0000 	EL	9-8-28	

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

6

46590

6

D3436-4RevA

Manufactured

No

100

Each

6.0000

1.0000


EL

9-8-27

Right Step

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

6

42322

4

46591

2

D3436-5RevA

Manufactured

No

100

Each

20.0000

4.0000


EL

9-8-28

Bushing

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

20

46749

20

AS 350-92-63

✱

M 17679

x 16.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

August 27, 2009 10:08:25 AM

Work Order ID: 51643

Parent Item: D3436-044RevA

Parent Item Name: Step RH



Comments:

Start Date: 8/27/09

Required Date: 9/04/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3436-7RevA  Cap		Manufactured	No			160 100	Each	14.0000	1.0000 	EL	9-8-27	

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

14

42323

14

D3436-9RevA

Manufactured

No



Pad

Each

18.0000

2.0000


Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

18

46593

18

~~14~~ 12

EP 09/09/08

8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

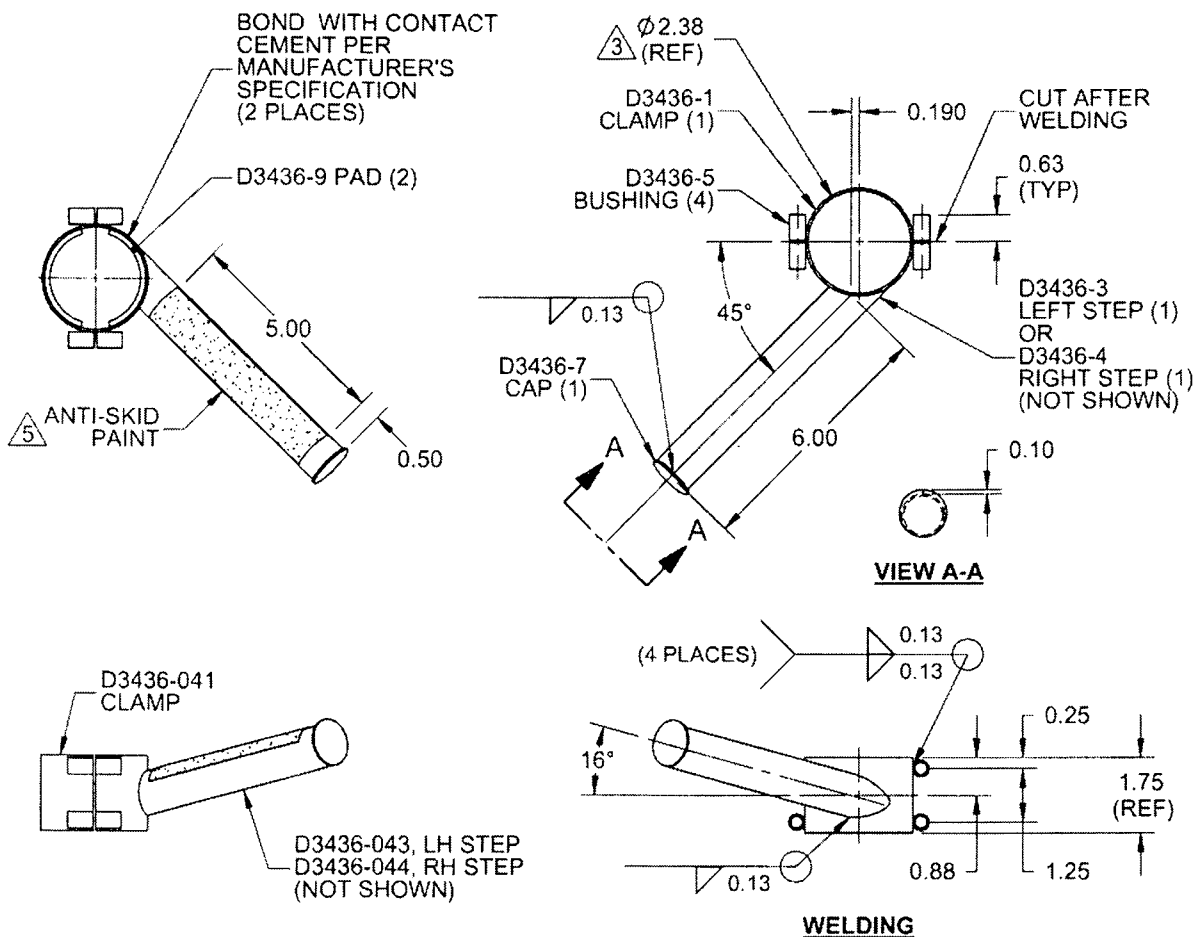
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN MB	DRAWN BY MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED H	APPROVED H	DRAWING NO. D3436	REV. A SHEET 1 OF 4
DATE 05.04.28	TITLE MAINTENANCE STEP		SCALE 1:4
A	05.04.28	NEW ISSUE	



NOTES:

- 1) POSITION PARTS AS PER JIGS DT8772 AND DT8773
- 2) WELD PER DART QSI 004
- 3) FILLET BOTH TOP AND BOTTOM EDGES OF CLAMP ALONG 2.38 I.D. SECTION TO 0.03 RADIUS TO PREVENT SCORING AND SCRATCHING OF SKID CROSS TUBE
- 4) FINISH: POWDER COAT WHITE GLOSS (4.3.5.2) PER DART QSI 005 4.3
- 5) APPLY BLACK ANTI-SKID PAINT AS SHOWN PER DART QSI 005 4.4
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 7) ALL DIMENSIONS ARE IN INCHES

RELEASED
[05.05.27]

WJ
51643

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

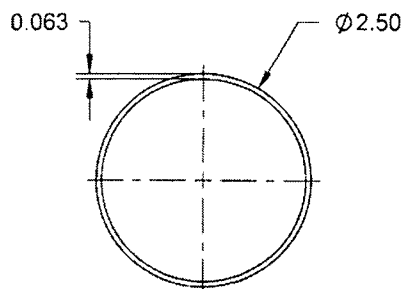
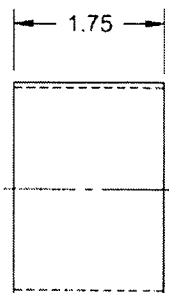
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

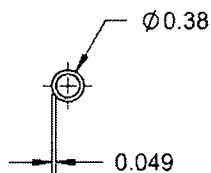
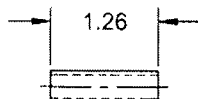


DESIGN MB	DRAWN BY MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3436	REV. A SHEET 2 OF 4
DATE 05.04.28	TITLE MAINTENANCE STEP		SCALE 1:2



D3436-1 CLAMP

- 1) MATERIAL: AISI 4130N STEEL TUBING PER MIL-T-6736, AMS 6371, 6360, 6361, 6362, 6373 OR 6374 (REF. DART SPEC. M4130N-T2500W063)



D3436-5 BUSHING

- 2) MATERIAL: AISI 4130N STEEL TUBING PER MIL-T-6736, AMS 6371, 6360, 6361, 6362, 6373 OR 6374 (REF. DART SPEC. M4130N-T0375W049)

5/6/05
43

D3436-1/-5, GENERAL NOTES:

- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

05-05-27

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

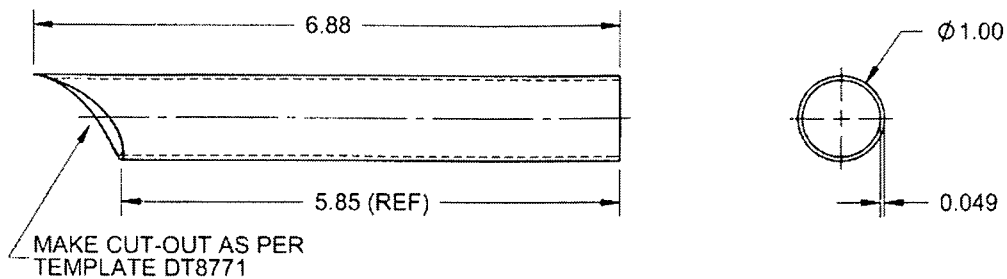
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



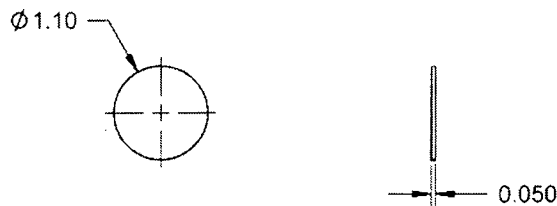
DESIGN MB	DRAWN BY MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>H</i>	APPROVED <i>H</i>	DRAWING NO. D3436	REV. A SHEET 3 OF 4
DATE 05.04.28	TITLE MAINTENANCE STEP		SCALE 1:2



D3436-3 LEFT STEP

(D3436-4 RIGHT STEP - OPPOSITE, NOT SHOWN)

- 1) MATERIAL: AISI 4130N STEEL TUBING PER MIL-T-6736, AMS 6371, 6360, 6361, 6362, 6373 OR 6374 (REF. DART SPEC. M4130N-T1000W049)



D3436-7 CAP

- 2) MATERIAL: AISI 4130N STEEL SHEET PER MIL-S-18729, AMS6350 OR AMS 6351 (REF. DART SPEC. M4130N-S050)

D3436-3/-7, GENERAL NOTES:

- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

57643

05-05-27 *H*

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

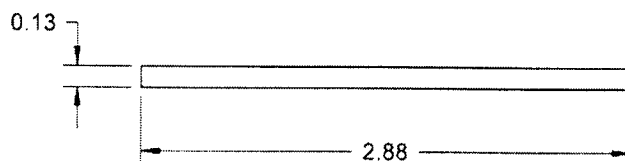
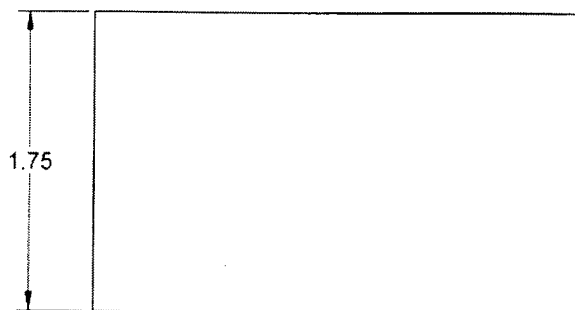
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN MB	DRAWN BY MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3436	REV. A SHEET 4 OF 4
DATE 05.04.28		TITLE MAINTENANCE STEP	SCALE 1:1



05-05-27 *[Signature]*

D3436-9 PAD

NOTES:

- 1) MATERIAL: 60 DUROMETER NEOPRENE SHEET, 1/8" THICK
(REF. DART SPEC. M-NEO60-S.125)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

57643

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.